

## 炬光科技入选“2023 年十大半导体制造解决方案提供商”

2023 年 6 月 8 日

近期，炬光科技被美国半导体行业知名杂志《Semiconductor Review》评选为 2023 年十大半导体制造解决方案提供商之一（TOP 10 SEMICONDUCTOR MANUFACTURING SOLUTIONS PROVIDERS 2023）。该评选活动由杂志专业团队发起，对全球范围内从事半导体生产制造相关业务的公司进行多轮综合评估，最终筛选出具有核心业务能力与解决方案显著优势的十家企业。在评选中，炬光科技凭借技术创新、卓越制造和快速响应从行业中脱颖而出，成为行业认可、全球可信赖的光子应用解决方案提供商。



获颁此项国际性业界殊荣后，炬光科技泛半导体制程事业部总经理戴晔接受了 Semiconductor Review 杂志的采访，分享探讨了炬光科技的核心能力、战略布局及未来规划。作为泛半导体生产制造及应用解决方案领域的提供商和领导者，炬光科技充分利用自身的领先地位，凭借深厚的技术积累及在全球多地域研发及生产制造的丰富经验，成功运用创新的应用解决方案满足客户极具挑战性的业务需求。杂志采访原文如下图或[点击此处](#)查看。

### Focuslight Technologies Inc.

Spearheading the Adoption of Photonics to Revolutionize Semiconductor Industry

The global semiconductor manufacturing industry is thriving thanks to the rising demand for semiconductor devices including CPU, GPU, memory chips, etc. Although the industry is growing at an unprecedented pace, manufacturers face certain challenges in reducing the size of chips to boost processing power, lower energy consumption, and minimize manufacturing costs. Nevertheless, photonics is presenting itself as a promising solution by significantly improving data transmission and processing efficiency, requiring less energy, and reducing manufacturing costs.

Leading this transition is Focuslight Technologies Inc., a company that develops and manufactures high-power diode laser components and materials, laser optics, and photonic application solutions with a focus in the field of automotive, pan-semiconductor, and medical & health application. Since 2007, the company has been providing customers with high-power photon generation diode laser components and photon control beam shaping micro-optics, significantly advancing the field of photonics. Its primary objective is to be a globally trusted photonics solution provider through innovation, manufacturing excellence, and fast response.

"We have recently extended our mission to encompass the development and manufacture of photonic solutions. We are confident that the three main market segments at the core of our business, namely automotive, pan-semiconductors, as well as medical and health, are avenues for success," says Robert Dai, president of Pan-Semiconductor Solutions Business Unit at Focuslight Technologies Inc.

The firm has been actively engaged in the semiconductor industry for several years, offering a comprehensive range of products, including diode lasers and micro-optics. Recognizing the evolving needs of its customers who desired complete solutions, integrating laser sources and optics into a single module, Focuslight leveraged its technological expertise to deliver customized solutions that added more value. To provide better service that is tailored to meet its customers' needs, Focuslight has established the Pan-Semiconductor Solutions Business Unit.

As a major player in wafer laser annealing field, Focuslight has been at the forefront of this technology for years. Its laser annealing systems have undergone rigorous testing by its customers and are

now used in high-volume production to generate extremely narrow line laser beam of 70um beam width with an aspect ratio of 160:1 with continuous energy output up to 1800W/mm<sup>2</sup>, achieving above 95% beam uniformity and above 98% output power stability for the wafer annealing process. The implementation of wafer annealing technology has significantly improved the yield of wafers. In addition, customized solutions are provided by Focuslight based on specific material types used, with wavelengths and energy densities tailored accordingly. This technology can also be applied to solar cells, SiC, and other advanced materials to adapt and improve the performance required in various applications.



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Focuslight has established R&D centers in China, Germany, Ireland, Russia, and the US to deliver innovative and state-of-the-art products to its customers. The company specializes in eutectic bonding, thermal management, thermal stress control of high-power diode lasers, as well as beam shaping such as beam transformation, homogenization, line beam shaping, etc and is well-positioned to provide localized services in various parts of the world. The firm intends to utilize its advanced manufacturing capability to lower the costs of laser applications further, making them more accessible to everyone.

Focuslight has distinguished itself in the industry by placing a strong emphasis on technology innovation, which has resulted in over 420 patents as of March 2023. Its wafer-level micro-optics manufacturing processing technology have gained a strong global market presence. The company's commitment to investing in technological development and providing comprehensive support to its customers worldwide underpins its goal of continuing to develop innovative products and technologies for IC wafer annealing applications.

### 关于我们

炬光科技是国家级高新技术企业，成立于 2007 年 9 月，主要从事光子产业链上游的高功率半导体激光元器件和原材料（“产生光子”）、激光光学元器件（“调控光子”）的研发、生产和销售，目前正在积极拓展光子产业链中游的光子应用模块、模组、子系统（“提供光子应用解决方案”）业务，重点布局汽车应用、泛半导体制程、医疗健康。炬光科技已发展成为全球高功率半导体激光器及应用领域有影响力的公司和品牌，被中国光学学会激光加工专业委员会授予“高功率半导体激光产业先驱”称号。目前炬光科技在中国西安、东莞、海宁，德国多特蒙德拥有生产基地和核心技术团队，并已通过 ISO 14001、ISO 45001、ISO 9001 和 IATF 16949 等质量管理体系认证。2021 年 12 月，炬光科技在上海证券交易所科创板成功上市（股票代码：688167）[炬光科技 - 探索永不止步 \(www.focuslight.com\)](#) 或扫描二维码关注炬光科技微信公众号！

